

19971031.ba v01_n749.bam.971031 v01_n750.bam.971031

>From ???@??? Sat Nov 01 03:33:18 1997
Message-Id: <199710311814.MAA21519@sco.theporch.com>
Date: Fri, 31 Oct 1997 12:14:49 CST
Subject: BOATANCHORS digest 1749

BOATANCHORS Digest 1749

Topics covered in this issue include:

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- 2) Wanted
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- 3) Re: Tube vs. SS Rectifiers
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- 4) R-390A Mystery Parts??
by Larry Wolken <rhys@ix.netcom.com>
- 5) Re: tubes n testers
by w7ni@teleport.com (Stan Griffiths)
- 6) Re: R-390A Mystery Parts??
by Morris Odell <morriso@vifp.monash.edu.au>
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by Gary Harmon <gharmon@txdirect.net>
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by Ho4bart@aol.com
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by Ed Tanton <n4xy@bellsouth.net>
- 10) 25Hz vs 60 Hz Transformers
by "Don L. Davis" <dxguy@earthlink.net>
- 11) Re: 30-S1 and tube subs
by "Cal J. Eustaquio" <ceustaqu@polymail.cpunix.calpoly.edu>
- 12) TV-7D
by "glen galati" <eldim@worldnet.att.net>
- 13) WERS
by "Richard L. Duell" <rduell@iac.net>
- 14) Re: Military Connectors
by polepeeg@aa4rm.radio.org (BA x-actions hr)
- 15) William Perry
by Garey Barrell <k4oah@mindspring.com>
- 16) RE: 51J4 low freq hummmm
by polepeeg@aa4rm.radio.org (BA x-actions hr)
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by polepeeg@aa4rm.radio.org (BA x-actions hr)
- 18) RE: on a lighter note
by Laird Tom N <LairdTomN@JDCORP.deere.com>
- 19) 25hz posting

by "Paul Bernhard" <W2TU@classic.msn.com>
20) Re: 25hz transformer use (long)
by Henry van Cleef <vancleef@netcom.com>
21) Crystal lore
by "A. B. Bonds" <ab@vuse.vanderbilt.edu>
22) Litz war
by "A. B. Bonds" <ab@vuse.vanderbilt.edu>
23) RE: 51J4 low freq hummmm
by Ed Sieb <esieb@gmsiworld.com>
24) RE: 51J4 low freq hummmm
by polepeeg@aa4rm.radio.org (BA x-actions hr)
25) BA's in radio ad
by Jay Coward <jayc@hpcmr42.sj.hp.com>
26) Re: 51J4 low freq hummmm
by Al Klase <skywaves@bw.webex.net>
27) B&K Tube Checker Setting Needed
by Spencer Petri <spetri@e-tex.com>
28) RE: 51J4 low freq hummmm
by Ed Sieb <esieb@gmsiworld.com>
29) Boatanchors, another funny story.
by Roger Faulstick <agemi@flips.net>
30) Hartley and Regen
by Ronnie Hull <w5sum@ms1.nwla.com>

Date: Thu, 30 Oct 1997 17:33:24 -0800 (PST)
From: Dick Dillman <ddillman@igc.apc.org>
To: boatanchors@theporch.com
Subject: Reproduction Dials
Message-ID: <2.2.16.19971030173318.395fa4f4@pop.igc.org>

Former listmember WB6TMY asked that I post the information below for those who might find it useful.

>From: rockseaent@aol.com (RockSeaEnt)
>Newsgroups: rec.radio.amateur.misc
>Subject: Repro Dial Faces
>Date: 30 Oct 1997 03:05:22 GMT
>
>We have lots of reproduction dial scales for old radios... Airline to
>Zenith.
>
>If we don't have it we will make it! New: Atwater Kent 337, Midwest LL-12,
>Silverstone 6002, 8003, 8004 and more.
>
>Visit our web page at: <http://members.aol.com/RockSeaEnt/>

>
>or E-mail for info and price list: dials@juno.com
>or just call: (805) 646-7362.
>
>Thanks, Mike

Regards,

Dick

Dick Dillman
<ddillman@igc.apc.org>
WPE2VT W6AWO
Collector Of Heavy Metal:
Harleys, Willys and Radios Over 100lbs.

Date: Thu, 30 Oct 1997 20:45:29 -0600
From: Merv Schweigert <k9fd@htc.net>
To: boatanchors@theporch.com
Subject: Wanted
Message-ID: <9710310245.AA20227@ns.htc.net>

#1 Will be making a trip to Arizona over thanksgiving week,
And am looking for a BC348 receiver in real nice condition.
Prefer no front panel mods, AC supply mods OK etc. Would be
able to pick up on the route from St Louis to Ariz.

#2 For a good friend without internet, he is looking for a
Viking VF0-122 for a viking 2. A johnson desk kilowatt in
good shape, and a HR050 table, with coils, in good shape..
If you have one or know of one will forward to him, he is
willing to pay good price for good condition gear.

#3 Still looking for the smaller size prop pitch motor, in
most any condition for parts or rebuild. Can also pick up
on the Ariz. run if need be.

Appreciate any help, thanks 73 Merv K9FD

Date: Thu, 30 Oct 1997 22:25:52 -0600
From: rlahlum@juno.com (Ross J Lahlum)

To: bdhall@ghg.net
Cc: boatanchors@theporch.com
Subject: Re: Tube vs. SS Rectifiers
Message-ID: <19971030.223000.9038.1.rlahlum@juno.com>

Ben,

I agree with this method. This is what I do in my own designs. I use separate transformers on separate AC switches for the filaments and the B+. I think you don't see it often in commercial designs because of the added cost of 2 transformers, but when you're designing one-of-a-kind stuff just for your own use, you don't worry about profit margins and can get away with it!

73,
Ross KB9JJR
rlahlum@juno.com

>In a perfect world, I'd like to heat all the non-rectifier tube
>filaments,
>and then apply B+ and filament power to the rectifier at the same
>time, so
>that as the rectifier heats up, the B+ in the set rises gradually...
>Comments?
>
>Anyone have one of those Eimac "Care and Feeding Guides?" I think it
>addressed this topic rather succinctly...
>
>Thanks and 73,
>Ben
>

Date: Thu, 30 Oct 1997 22:47:25 -0600 (CST)
From: Larry Wolken <rhys@ix.netcom.com>
To: boatanchors@theporch.com
Subject: R-390A Mystery Parts??
Message-ID: <1.5.4.16.19971031004333.2ae7158c@popd.ix.netcom.com>

Hi Gang --

Was looking at the AF deck on my EAC R-390A the other day and finally "noticed" something that I'd looked at many times before. On one end of the AF deck is a metal cover plate screwed to the chassis that covers two holes. One hole is marked K602 (K601 is the break-in relay) and the other hole is marked XV606, nomenclature that would indicate a tube socket. What were they for???

If they were for some earlier version (poss the R-390) why did they bother to continue to leave these holes punched through 1967. The cover plate and holes show up in the TM-11 so I can't imagine they were for some innovation planned for the future but who knows. This topic may have been around before -- it's an obvious, but I don't remember it in the last few years. Sure stirred my curiosity. Anyone know what we've been missin?

73

Larry Wolken N3OJD

Date: Thu, 30 Oct 1997 21:04:50 -0800 (PST)
From: w7ni@teleport.com (Stan Griffiths)
To: laffitte@prtc.net
Cc: boatanchors@theporch.com
Subject: Re: tubes n testers
Message-ID: <199710310504.VAA04610@mail1.teleport.com>

> The last OS8 was all finished except for one detail, there was some
>crowding due to a problem with the horizontal amplifier. Checking the
>whole circuit of the Hor.Amp. yielded nothing wrong. I went for the
>tubes. But you should have done that on the first place,you would say.
>Well the 6J6 and 12AT7s had been replaced with "tested" good ones. After
>removal and replacement of the 6J6 with the one that was originally in
>the circuit, everything went back to normal. The adjustments described
>in the manual were made and the OS8 is working perfectly. What about the
>6J6? The replacement tested fair in the tube tester while the one that I
>took out tested very good! Another point to add to the data which is
>becoming statistically significant and indicates that tube testers are
>not definitely the final word but maybe only a fair indication specially
>in critical circuits. So, when in doubt, replace and forget the tester.

>Guido E. Santacana KP4FAR

This story supports the position that Tektronix took in having NO TUBE TESTERS available in the oscilloscope test department in the early '60s. The circuit the tube will be used in is the only real valid tester for the tube. If it works in the circuit, it's good, if not, it's bad . . .

Stan w7ni@teleport.com

Date: Fri, 31 Oct 1997 17:13:03 +1100
From: Morris Odell <morriso@vifp.monash.edu.au>
To: rhys@ix.netcom.com
Cc: boatanchors@sco.theporch.com
Subject: Re: R-390A Mystery Parts??
Message-ID: <345976EF.7FF5@vifp.monash.edu.au>

Hi Larry and the gang,

Larry Wolken wrote:

>
> Was looking at the AF deck on my EAC R-390A the other day and finally
> "noticed" something that I'd looked at many times before. On one end of the
> AF deck is a metal cover plate screwed to the chassis that covers two holes.
> One hole is marked K602 (K601 is the break-in relay) and the other hole is
> marked XV606, nomenclature that would indicate a tube socket. What were
> they for???

These are for the squelch. Actually they are where the R390 (non-A) squelch is fitted. The '390A had the squelch left out for economy reasons, but the rest of the subchassis appears to be pretty well the same, at least mechanically. If you compare the circuit diagrams of the 2 sets you will see that the R390A has the appropriate wires in its cable loom and plugs so the squelch can be retrofitted easily.

>
I looked into this last year when I investigated the squelch that had been retrofitted to my R390A.

73 de Morris VK3DOC

Date: Fri, 31 Oct 1997 00:42:14 -0600
From: Gary Harmon <gharmon@txdirect.net>
To: COLLINS@LISTSERV.TEMPE.GOV
Cc: boatanchors@theporch.com
Subject: Need R-388 Top Cover and Tools
Message-ID: <3.0.3.32.19971031004214.006dd284@mail.txdirect.net>

Does anyone have or know where I can obtain a top cover and the two items (tools?) that snap into the holders for the R-388 (51J-3) receiver?

Thanks in advance and 73,
gary

=====
Gary H. Harmon, Jr., K5JWK
6302 Robin Forest
San Antonio, TX 78239-3218
(210) 657-1549
gharmon@txdirect.net

+Too Many Projects, Not Enough Time!
++Better to Have and Not Need than to Need and Not Have!
+++Pack Unto Others As You Would Have Them Pack Unto You!
=====

Date: Fri, 31 Oct 1997 01:55:48 -0500 (EST)
From: Ho4bart@aol.com
Message-ID: <199710310655.BAA16367@mrin47.mail.aol.com>

e dated 97-10-29 04:17:07 EST,
rhs@pacbell.net (Rudolf H. Salomon) writes:

> I remember listening in on the police, in Los Angeles,
just above the standard AM band, on a tweaked AM radio,
back in 1965, just as the riots broke out.

i listened to the police in ?? California city from Seattle
in the mid 60s, and also heard them on an old motel
table radio in grants pass OR, one of those old sets that
tuned up to 1700 or so to pick up "police calls". i imagine
that listeners in Australia or even Europe were occasionally
treated to this entertainment. i was a youngster new to
radio dx-ing then but i certainly sensed that this particular
service on MW was a rare & precious anachronism. BTW
in scanning a NW electronics industry article abt police
radio 1947, i see they still had interstate police CW
networks. does it seem the police communications
included both the leading and trailing edge of technology?
hue miller

Date: Fri, 31 Oct 1997 03:09:29 -0500
From: Ed Tanton <n4xy@bellsouth.net>
To: k9fd@htc.net
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Wanted
Message-ID: <3.0.1.32.19971031030929.00a74730@mail.atl.bellsouth.net>

Hi Merv... your friend does understand that the 'going rate' for EF Johnson Desk Kilowatts-with the desktop-is ~ \$5000 doesn't he???

72/73 ZUT!!!

Ed Tanton N4XY	EMAIL: n4xy@bellsouth.net
189 Pioneer Trail	
Marietta, GA 30068-3466	TEL: (770)579-3933 V/MBX/FAX

Date: Fri, 31 Oct 1997 01:14:15 -0800
From: "Don L. Davis" <dxguy@earthlink.net>
To: boatanchors@theporch.com
Subject: 25Hz vs 60 Hz Transformers
Message-ID: <3459A151.473@earthlink.net>

Just a quick note re: Paul's comments on transformer impedance at 60 vs 25Hz.

The impedance "seen" at the primary terminals of any power transformer is a combination of the reflected secondary load impedance (the secondary load resistance times the square of the turns ratio [PRI/SEC]) plus the losses associated with the magnetizing current (a function of the applied voltage, frequency and losses in a given core) all in series with the winding resistance. In a properly designed commercial transformer, the magnetizing losses may be 5 to 10% of the total rated load of the transformer; for high efficiency use (for space as an example - what I do for a living) these losses seldom exceed 1%. In an un-loaded transformer, the only current draw is due to the magnetizing current.

When a transformer designed for 25Hz is operated at 60 Hz the losses in the core material may increase slightly due to more losses at the higher frequency. The transformer also, however, will be less saturated than at 25Hz, and will have a higher no-load primary inductance (not of great interest to us boatanchor folks) which might reduce losses somewhat. The total losses will not be greatly higher or lower under these circumstances, since 90% of the losses are in the copper at full load, and core losses are fairly constant over a wide load range.

Conversely, operating a 60Hz transformer at 25Hz will have a disastrous effect. The transformer core will probably saturate, causing the full primary voltage to be applied across the resistance of the primary winding (fairly low) for a portion of each cycle without transferring energy to the secondary. This will cause the windings to heat.

To better see what's going on, imagine the extreme cases: 1.) Very low frequency near DC - no energy is transferred, and the PRI sees the full voltage as dc dissipation. 2.) Very high frequency (100 kHz or more) and you can imagine the losses in a big chunk of iron would swamp any energy that would be transferred to the secondary. General Rule: Transformers are designed for very specific parameters, and don't have a wide, universal range of application (except of course for all of the exceptions & cases where we can get away with something - standby for 20 or 30 msgs on this - Hi!).

73s Don Davis DXGUY@earthlink.net
Aerospace power conversion engineering manager, etc.

Date: Fri, 31 Oct 1997 01:08:58 -0800 (PST)
From: "Cal J. Eustaquio" <ceustaqu@polymail.cpunix.calpoly.edu>
To: boatanchors@theporch.com
Subject: Re: 30-S1 and tube subs
Message-ID: <Pine.HPP.3.96.971031010655.24401A-100000@monet.artisan.calpoly.edu>

My thanks to all who responded to that posts. Whew!! Many many responses. And good info too! Haven't got the amp yet so that 4CX1500B will definitely be something to think about. Looks like that will be the one to retube the amp if I get it. O.k. Thanks all for the information. May the force of Art Collins be with you all! Cal, N6KYR.

Date: Fri, 31 Oct 1997 01:49:17 -0800
From: "glen galati" <eldim@worldnet.att.net>
To: <qc01870@stp03.guidant.com>
Cc: <boatanchors@theporch.com>
Subject: TV-7D
Message-ID: <19971031094955.AAA18848@glengala>

Hello Scott,
Regarding TV-7D and manual. The Air force Technical order was an expansion of the original Army TM. It added many tubes that were developed after the last Edition of 17 Jan 62. The small booklet became too expensive to reproduce. The original TB 11-5083-1 and AF T.O. 33AA21-5-1 were replaced by Navy NAVWEPS 16-45-637/Army TB-6625-274-12/1. The Air Force T.O. 33AA-5-31P dated 15 Dec 86 was the last change. The Field &

Depot TM11-6625-274-35 dated 30 June 60 covers all versions of the TV-7/U, TV-7A/U, TV-7B/U and TV-7D/U. I had a TV-7D/U that had TV-7E/U on the meter front face. I retired from the Air Force in Nov of 83 so I'm not fully up to date on any changes past that time. The AF Index to Technical Orders for Test & Measurement Equipment 33 Series would list all tyhe manuals available in addition to the changes, revisions, and their respective dates. I hope that this answers your questions

Date: Fri, 31 Oct 1997 06:02:01 -0500
From: "Richard L. Duell" <rduell@iac.net>
To: boatanchors@theporch.com
Subject: WERS
Message-ID: <2.2.32.19971031110201.00f251c4@iac.net>

Does anyone on the list collect WERS stuff? I've got a couple of letters, sans envelopes, that were sent the last week of operation. One is a schedule of operations for the Chicago Metropolitan Area for Divisions 1,2 and 3 dated July 30, 1945. The other is dated July 29, 1945 and starts, "With President Truman's announcement of the abolishing of he National Office of Defense and with Victory in Europe, the need for maintaining a Citizen's Defense Corps has passed."

Both are single sheets that were obviously opened, read and then stuck in the book
I found them in. They are in excellent condition, but folded.

If anyone collects this sort of stuff, let me know what you have to trade. In the paper arena, I like any old art deco illustrations (ads, whatever) with a radio theme.

73, Rich - W5VDU

Date: Fri, 31 Oct 1997 08:15:00 -0500
From: polepeeg@aa4rm.radio.org (BA x-actions hr)
To: mmaseda@gte.net
Cc: boatanchors@theporch.com
Subject: Re: Military Connectors
Message-ID: <199710311315.IAA02148@aa4rm>

There's a fella named William Perry in Louisville, KY who
does these & Gary K40AU has his data.

I do too out in the shack

If you want it, write me back

Marty

Date: Fri, 31 Oct 1997 08:30:37 -0500
From: Garey Barrell <k4oah@mindspring.com>
To: boatanchors@sco.theporch.com
Subject: William Perry
Message-ID: <3.0.1.32.19971031083037.0069d270@pop.mindspring.com>

>There's a fella named William Perry in Louisville, KY who
>does these & Gary K40AU has his data.

>

>I do too out in the shack

>

>If you want it, write me back

>

> Marty

>

Hi Marty -

Oh well, you were close anyway.... See sig below :-)

1(502) 893 8724
William Perry Company
92 Beechwood Rd
Louisville Ky 40207

fax 502 893 9220

MIL connectors. Green and RF

73,

Garey - K40AH
k4oah@mindspring.com
Atlanta

Date: Fri, 31 Oct 1997 08:44:00 -0500
From: polepeeg@aa4rm.radio.org (BA x-actions hr)
To: boatanchors@theporch.com, esieb@gmsiworld.com
Subject: RE: 51J4 low freq hummmm
Message-ID: <199710311344.IAA02242@aa4rm>

Say I'll bet you & Tom are using wide range (stereo) headsets.

The 5V4 rect's output has 120hz ripple, not 60hz. So I bet there's inter-core coupling between the output xfmr & the power xfmr.

Tom the 'other 51J4' has no evidence of this with diaphragm-type GI headset that has no response that low... and my spkr can only go dn to 100hz on a good day.

Now this'd be total nonsense if headset p/u is before the output xfmr.

Marty

Date: Fri, 31 Oct 1997 08:51:59 -0500
From: polepeeg@aa4rm.radio.org (BA x-actions hr)
To: boatanchors@theporch.com
Subject: BA Halloween
Message-ID: <199710311351.IAA02263@aa4rm>

All who visit my shack tonight will receive 'treats' of gauze wrapped 6AL5s!

You'll know the place in near-downtown Atlanta. Has 25KV 1kw sign-xfmr-powered 4' Jacobs ladder. Huge plastic Pumplin on SCR268 60hz selsyn, and a HP200CD into a GI PA (AN/TIQ-3) with reflex (LS-266) trumpet in yard.

BTW HP's 1st big contract on the oscillators was with Disney to make 'scary sounds' for Fantasia.

Marty

Date: Fri, 31 Oct 1997 08:11:46 -0600
From: Laird Tom N <LairdTomN@JDCORP.deere.com>
To: "'BA'" <boatanchors@theporch.com>
Subject: RE: on a lighter note

Message-ID: <0958DD57326BD011813300805FBE98DA01DCDE99@e90corp2.dx.deere.com>

> I have a pair of Realistic "Guaranteed for life" 6LB6's in the final
> of my Galaxy GT-550. Sure hope RS will still honor their old guarantee
> when those guys expire.
>

It's been my experience the Radio Shack will honor the free
replacement

ONE TIME. Your replacement tube won't have the warranty.

Tom Laird WC9M Moline, IL
Wanted" Globe King 500 RF deck"

Date: Fri, 31 Oct 97 14:27:17 UT
From: "Paul Bernhard" <W2TU@classic.msn.com>
To: boatanchors@theporch.com
Subject: 25hz posting
Message-ID: <UPMAIL18.199710311427420126@classic.msn.com>

I had my very first intro to the amount of information and expertise available on this list. As an apprentice instructor and retired electrician I had a nut and bolt and textbook knowledge of the subject but not the in depth info that came back. This will be of much help in future classroom sessions. Thanks to all who took the time to reply and hope many of you can stop in and say hello next summer at the Naval Park here in Buffalo!

By the way, I hope to have the station, W2TU/2, operating in honor of veterans day, Nov. 11, so maybe we can connect on the ham bands. More on the freqs and times and equipment later.

Tnx agn es 73

Paul W2TU
w2tu@msn.com

Date: Fri, 31 Oct 1997 07:43:42 -0700 (MST)
From: Henry van Cleef <vancleef@netcom.com>
To: morriso@vifp.monash.edu.au
Cc: boatanchors@theporch.com
Subject: Re: 25hz transformer use (long)
Message-ID: <199710311443.GAA07101@netcom12.netcom.com>

As Morris Odell discourses

>

(Snip snip)

Morris's discussion about rise of current over time, magnetization, leakage inductance, etc. covers it pretty well. You can think of current rise in the usual impedance ($R \pm jX$) sense, and remember that magnetization force is a strictly a function of current --- voltage does not enter into the calculation, except as a definer of current. The lower the frequency, the longer a time the current has to rise, and there has to be enough iron in the core to take all of the magnetic driving force without the core saturating. Allegheny Ludlum Steel, who make specialty steels, including transformer laminations, had several good publications and data sheets discussing B-H loops, eddy currents, hysteresis, etc. It is actually much easier to understand all of this if you understand the basics of Faraday's and Clerk-Maxwell's work. I don't know offhand of a a good text on this that is pitched to the ham radio audience (as are ARRL stuff).

>

> >While the turns ratio will keep the voltage ratings the same,

>

> This is about the only thing that's unaffected by frequency!

Yes, approximately. There is a slight reduction in transformation ratio (the actual voltage out vs. voltage in) for a given turns ratio due to core losses, and you have to consider winding resistances. Also note that the waveshape of the output voltage into a resistive load mirrors the waveshape of the input CURRENT, not the voltage, and this has rumdoolies introduced by any core magnetization nonlinearities, which always exist.

>

> OTOH, I've always had a bit of trouble understanding how audio

> transformer impedances are defined. You'd think they would work OK at

> other impedance levels but they don't seem to like it.

AHA! That's tricky. Impedances for non-power work are measured at 1 Khz., something they never tell you. That's why the hummer in a GR 650A bridge is 1 Khz.

First, consider impedance ratio. This is simple. It is the square of the turns ratio. That is, if the turns ratio is 10:1, the impedance ratio is 100:1. However, you have to operate the unit with

a. Enough power to have the iron being magnetized and operating through its BH loop. With most irons, there is a threshold (why the term "hysteresis" is used) of magnetizing force needed to start magnetizing the iron (coercive force). There is also a maximum power you can put in before the iron starts saturating. So defining the characteristics of a tranformer as absolute impedance numbers covers

both the transformation ratio and power levels for optimum transformation.

Keep in mind that "good audio" is "flat" (actually, you can swallow $\pm 1\text{db}$) from 20 Hz to 15Khz, which is a huge range to put through an iron core. Also, for "good" audio, you are dealing with a dynamic range on the order of 30 db. (These are 1940's numbers---the golden ear crowd expect more). So a "good" audio transformer design is not just a paper design, but has some tweaking to handle frequency response and dynamic range. It's amazing what you can and can't do with the human ear, in terms of anomalies, and a lot of the "golden ear" stuff is a desire for anomalies. The really good literature on the subject began with Helmholtz "On the Sensations of Tone," and the Bell Labs studies of Fletcher and Munson ca. 1930, followed by RCA's Harry Olson are all very good background reading. Olson in particular covers electrical engineering stuff, as well as reproducer and acoustics. The work done by Victor in the twenties to come up with the "Orthophonic" acoustical phono system (which was a recording-to-listener complete system) was the basis for a lot of this 1930's audio work.

The attraction of 16 and 25 Hz. for rail traction applications has to do with the characteristics of large universal-wound motors suitable for traction use. The windings and iron in these have the same issues as in transformer design. In addition, you are changing flux in the armature, and using AC to drive it, you are getting delays between voltage and current rise, cross-transformation effects between armature and field, etc. The universal winding is to allow the commutation point to be fixed (the angle between the brush plane and the field magnetization plane) without too much sparking. Minimum sparking comes when adjacent commutator bars are at the same voltage. Reducing the frequency to the minimum that you can build a practical transformer for gives the benefit of high voltage distribution economies and reduces the AC-specific problems in brush-type motor design. Most of the problems were solved just before WWI, and AC electrification of Swiss railways (16 Hz system) and US Northeast (Pennsylvania, Reading, New Haven, 25 Hz) railways followed. While there was some improvement in steels for use in motors, the big changes (allowing 50-60 Hz commercial mains power use) came with rectification capable of handling the power in the late 30's. Rectification plus chopping became practical in the late sixties, which allows use of induction motors, which are true AC motors. The best running torque in an induction motor is developed with a "slip" of about 5-10 Hz, which means that if you are starting a locomotive, just hit the fields (remember, you have to use two or three phases to get field magnetization rotation) with 5-10 Hz., and increase the frequency to maintain that slip as the system accelerates. I am jumping over a lot of design stuff here to point to

the main "feature" of using variable frequency AC for rail traction.

>
> 73 de Morris VK3DOC
>

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=====
Hank van Cleef
=====

Date: 31 Oct 1997 09:12:33 -0600
From: "A. B. Bonds" <ab@vuse.vanderbilt.edu>
To: boatanchors@sco.theporch.com
Subject: Crystal lore
Message-ID: <1997Oct31.091237-0600@spike.vuse.vanderbilt.edu>

I humbly ask the Shamans in this tribe to shake their chicken bones
and lay some knowledge on this unworthy acolyte.

During the all-too-brief Indian Summer of my Comet Pro, I determined
that the crystal filter was faulty, in that nothing was getting
through it. While I have the front panel off for some rouge and
mascara, I dug into the crystal system. Regrettably, the first thing
I saw was fewmets ("Droppings of the beast pursued", with apologies to
T. H. White), in this case spoor of the Dreaded Previous Owner. The
screw heads were chewed, which is a general indication of the care
lavished on what repair might have been intended.

The crystal holder is a 3" x 4" chunk of fiber about 1/4" thick. It
has a switch and a single-plate tuning cap for phase adjustment. The
crystal itself sits in a square hole in the fiber and is sandwiched
between two flat metal plates screwed to the surfaces of the fiber
chunk. The good news is that the crystal is still there, a
goodly-sized rock (465 kHz) about half an inch square and nearly 1/4"
thick. The bad news is that it's not quite 1/4" thick, so it rattles
around in the hole and has no apparent connection with the remainder
of the proceedings.

I am presuming the there was at one time some sort of device
encouraging contact. I don't know what. I have considered cutting a
piece of shim stock that would fit the crystal and holding the whole
mess in place with the tension from the crystal cover screws. Any

other suggestions?

And who invented crystals anyway? Seems an unlikely device.

73 A. B. Bonds

Date: 31 Oct 1997 09:16:05 -0600
From: "A. B. Bonds" <ab@vuse.vanderbilt.edu>
To: boatanchors@sco.theporch.com
Subject: Litz war
Message-ID: <1997Oct31.091606-0600@spike.vuse.vanderbilt.edu>

Al Klase was kind enough to supply me with info on my Comet Pro (Thanks, Al!) and the coil specs indicate a need for about 80 ft of 10/41 Litz war (as they say in TN). The local Litz war store (which is next to the twist-lock electrolytic store) professed to be out of stock on that item. Any hints here?

73 A. B. Bonds

Date: Thu, 30 Oct 1997 09:09:49 -0500
From: Ed Sieb <esieb@gmsiworld.com>
To: "boatanchors@theporch.com" <boatanchors@theporch.com>,
 "esieb@gmsiworld.com" <esieb@gmsiworld.com>,
Subject: RE: 51J4 low freq hummmm
Message-ID: <01BCE513.93EAA8E0@dstephen.gmsiworld.com>

Marty,
You're quite right - I am using a nice pro-type stereo headset when I =
listen to my R388. When I use higher Z type phones, either 600 ohms or =
even higher, the hum is so low as to be negligible. Still... I'd like =
to keep pursuing the goal of virtual hum-free operation.

Ed. VA3ES

Date: Fri, 31 Oct 1997 10:47:58 -0500
From: polepeeg@aa4rm.radio.org (BA x-actions hr)

To: esieb@gmsiworld.com
Cc: boatanchors@theporch.com
Subject: RE: 51J4 low freq hummmm
Message-ID: <199710311547.KAA02398@aa4rm>

Ed....

Use an external output transformer for the 6AQ5.

Your goal pursuit cud end there - and you can use fones that go down thru 60hz

Marty

Date: Fri, 31 Oct 97 8:17:47 PST
From: Jay Coward <jayc@hpcmr42.sj.hp.com>
To: boatanchors@theporch.com
Cc: jayc@hpcmr42.sj.hp.com
Subject: BA's in radio ad
Message-ID: <9710311617.AA21470@hpcmr42.sj.hp.com>

Greetings to the Group,
I thought you all might like this. I heard on a recent radio advertisement here in the SF Bay area for a major cell phone manufacturer and service provider the following:

"Any other phone is a BOATANCHOR"

(my emphasis)
73, Jay

Date: Fri, 31 Oct 1997 11:30:05 -0500
From: Al Klase <skywaves@bw.webex.net>
To: esieb@gmsiworld.com
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: 51J4 low freq hummmm
Message-ID: <345A078C.E425C67A@bw.webex.net>

Anchorites & Anchorettes,

Over the years I've observed that a LOT of communications receivers have noticeable 120 cycle hum in their outputs. This is not really too suprising, as communications audio is generally construed to be limited to a 200-3000 cycle bandwidth. Classic headsets don't have

much bass response so the hum usually went unnoticed. Things are a little different when we plug in a modern stereo headset or connect to a full range speaker system.

Of course, if you're bothered by this problem, you'll want to make sure the filter caps are up to snuff, and that there aren't any obvious problems, but totally eradicating the hum may require you to "reengineer" the set. This is generally not recommended.

Here's a couple of simple solutions: (1) Use a "communications" headset that doesn't have much bass response. (Doctor it hurts when I do this.) (2) Connect into a hi-fi amp that has low-frequency roll off available. (3) Connect the headset or external amp via an attenuator. In the headset case a simple series resistor is sufficient. This allows you to turn up the receiver audio-output level and realize a better signal to noise ratio. E.g., you attenuate the hum by 15 dB and turn the volume control up to compensate.

Hope this helps,
Al

Date: Fri, 31 Oct 1997 10:48:15 -0600 (CST)
From: Spencer Petri <spetri@e-tex.com>
To: boatanchors@theporch.com
Subject: B&K Tube Checker Setting Needed
Message-ID: <m0xRKf5-0001ljC@e-tex.com>

Hello Mini-vacuumites,

Does anyone have the switch setting to check a 8393 nuvistor on the B&K series tube checker?

TIA,

73 de Pete WA5JCI EM21 "the future will be better tomorrow"

.....
6 Mtr -- WAS #490, WAC CW, DXCC/91 Countries, VUCC #361/626 Grids
.....
2 Mtr -- 36 States -- VUCC #346/183 Grids

Date: Thu, 30 Oct 1997 10:21:03 -0500
From: Ed Sieb <esieb@gmsiworld.com>
To: "'BA x-actions hr'" <polepeeg@aa4rm.radio.org>
Cc: "boatanchors@theporch.com" <boatanchors@theporch.com>
Subject: RE: 51J4 low freq hummmm
Message-ID: <01BCE51D.874E5000@dstephen.gmsiworld.com>

Hi Marty,
You wrote:
> Use an external output transformer for the 6AQ5.

OK... But I thought that the existing O/P transformer should be adequate =
for the task... it has taps for both 4 ohm and 600 ohms. maybe I'll =
just construct an outboard headphone interface box, with it's own =
output transformer, and drive it from the 600 ohm taps off the back =
panel terminal strip.

I also intend on using the Radio Shack DSP unit. It has a nice 5W amp =
built in, besides the very adequate filtering useful for BA receivers. =
Apparently, these units are still available in some few RS stores for =
about \$8.00 each!!! They're discontinued ("disco") and deleted from the =
catalog. The \$8.00 figure is the last clearance price quoted me about a =
month ago. But, I digress...

73, de Ed VA3ES/VE2BAQ (that's Boat Anchor Quality)

~~~~~  
Ed Sieb, VA3ES esieb@gmsiworld.com  
P. O. Box 8377, Ottawa Terminal, Ottawa, Ontario, K1G 3H8  
613-738-8924 (H) 613-599-5161 (W)=09  
AMI #529 Canadian Division Director.  
Member - Radio Club of America, QCWA, AWA  
Net Manager - Canadian Boat Anchor Net (3745 Kcs)  
~~~~~  


Date: Fri, 31 Oct 1997 12:55:27 -0500
From: Roger Faulstick <agemi@flips.net>
To: boatanchors@theporch.com
Subject: Boatanchors, another funny story.
Message-ID: <3.0.1.32.19971031125527.006936e0@mailhost.flips.net>

I went to a auction of surplus electronic equipment.
There was a very big lab type 0-32 VDC (linear) 100 Amp.regulated power
supply, that had to weight 200 lbs or more, that was In almost new condition.

When the auctioneer got to this item, he scrached his head and asked the
crowd what is this thing ? Some dude yelled out it is a "BOATANCHOR for a
small fishing boat".

The autineer rapped it with his cane and said "it doesn't look like one to
me, but if you throw this thing overboard you sure as hell going to kill
something.....Who will bid a dollar for it ?

As I remember It went for something like six dollars

Roger (I am a user not a collector) KD4AS

Date: Fri, 31 Oct 1997 12:11:46 -0600
From: Ronnie Hull <w5sum@ms1.nwla.com>
To: boatanchors@theporch.com
Subject: Hartley and Regen
Message-ID: <1.5.4.16.199710311131436.39cf6c9a@ms1.nwla.com>

alright fellers, I've got the building bug. Can someonw
refer me to a good source of diagrams to build a hartley
xmtr, and a good regenerative 2 or 3 tube reciever?

winter is coming on. Im out of projects... well.. don't
tell the wife I said that.. hehehehe

Ronnie

=====
W5SUM
Ronnie Hull
3131 Meadow Parkway dr.
Shreveport, La 7110
=====

End of BOATANCHORS Digest 1749

>From ???@??? Sat Nov 01 03:34:07 1997

Message-Id: <199711010456.WAA06359@sco.theporch.com>
Date: Fri, 31 Oct 1997 22:56:22 CST
Subject: BOATANCHORS digest 1750

BOATANCHORS Digest 1750

Topics covered in this issue include:

- 1) Re: 25hz transformers --> audio transformers
by Richard Loken <richardlo@devax.admin.athabascau.ca>
- 2) Question about Wm Perry Co, Louisville
by BOB RAGAIN <RAGAIN@hubvx6.sedalia.wireline.slb.com>
- 3) R-390 Power Supply rebuild ?'s
by Dexter Francis <cwest@xmission.com>
- 4) Nice DSP for Boatanchors
by Ed Sieb <esieb@gmsiworld.com>
- 5) Re: R-390 Power Supply rebuild ?'s
by Scott Robinson <spr@dolby.com>
- 6) Drake 2-C for trade
by Bob Roehrig <broehrig@admin.aurora.edu>
- 7) Military Radio & misc. items FS
by "STEVE FINELLI" <navrad@enter.net>
- 8) WTB: ART-13 dynamotor
by "Manuel W4SSB" <mmaseda@gte.net>
- 9) Price advice, DoD tx's and rx's
by "A. B. Bonds" <ab@vuse.vanderbilt.edu>
- 10) FS: Hallicrafters SX-73/R274D
by bill wilson <billo@nti.net>
- 11) Larry's Halloween giveaway
by "Lawrence R. Ware" <lrware@pipeline.com>
- 12) A VERY interesting wrong number!
by Tom Norris <badger@telalink.net>
- 13) FS: VINTAGE TUBES
by DEE ALMQUIST <w4pnt@rica.net>
- 14) WTD JOHNSON & DRAKE SALES LITER.
by DEE ALMQUIST <w4pnt@rica.net>
- 15) Re: Nice DSP for Boatanchors
by Ken Gordon <keng@uidaho.edu>
- 16) Re: Nice DSP for Boatanchors (fwd)
by Ken Gordon <keng@uidaho.edu>
- 17) National HRO-60 B+ power supply question
by Dennis Gibbs <dgibbs@Rational.COM>
- 18) Gibson Girl
by Andre Guibert <aguibert@sympatico.ca>
- 19) Re: Gibson Girl
by "Joseph W. Pinner" <kc5ijd@sprintmail.com>
- 20) Tubes vs Silicon
by K6qy@aol.com

- 21) 51-J4 dial needed
by oglesby2@ix.netcom.com (John Oglesby)
- 22) RS DSP filter...
by Ken Gordon <keng@uidaho.edu>
- 23) R390A antenna Jacks
by "Jim Zellmer" <zellmer@raccoon.com>
- 24) Re: National HRO-60 B+ power supply question
by Bob Roehrig <broehrig@admin.aurora.edu>
- 25) Re: 51-J4 dial needed
by Mike Maloney <ac5p@ionet.net>
- 26) Larry's Halloween giveaway (part II)
by "Lawrence R. Ware" <lrware@pipeline.com>

Date: Fri, 31 Oct 1997 11:42:56 -0700 (MST)
From: Richard Loken <richardlo@devax.admin.athabascau.ca>
To: Morris Odell <morriso@vifp.monash.edu.au>
Cc: boatanchors <boatanchors@sco.theporch.com>
Subject: Re: 25hz transformers --> audio transformers
Message-ID:
<Pine.PMDF.3.95.971031113544.541065882A-100000@devax.admin.athabascau.ca>

On Fri, 31 Oct 1997, Morris Odell wrote:

> >While the turns ratio will keep the voltage ratings the same,
>
> This is about the only thing that's unaffected by frequency!
>
> OTOH, I've always had a bit of trouble understanding how audio
> transformer impedances are defined. You'd think they would work OK at
> other impedance levels but they don't seem to like it.

Yes, this is what the Audiocyclopedia says as well, don't run an audio transformer more than 15% outside its design impedance because the response goes all to hell. They also tell you what things are done to give an audio transformer its wide response at the designed impedance but I forget them all.

A side note from the above would be that a filament transformer makes a lousy audio matching transformer because there is no effort to make it work over a wide frequency range. And the totally spurious conclusion? Use a 70v line transformer's 8 Watt tap to match your R390 to that 8 ohm speaker - its designed for the job and the impedance is right.

Richard Loken VE6BSV, Systems Programmer - VMS
Athabasca University
Athabasca, Alberta Canada
** richardlo@admin.athabascau.ca **

Date: Fri, 31 Oct 1997 12:38:17 -0700 (MST)
From: BOB RAGAIN <RAGAIN@hubvx6.sedalia.wireline.slb.com>
To: boatanchors@theporch.com
Cc: RAGAIN@hubvx6.sedalia.wireline.slb.com
Subject: Question about Wm Perry Co, Louisville
Message-ID: <971031123817.3ea4fbca@hubvx6.sedalia.wireline.slb.com>

Fellow boatanchorites,

I got to visit a surplus/boatanchor place in Louisville once, probably 15 years ago, that didn't have a "store", but consisted of a large lot with various open shed-type buildings and barns full of stuff. There were also piles of military surplus under tarps scattered around the field.

Has anyone been to the William Perry Company? Could this be the same place or is there another BA place in Louisville?

Thanks,

Bob

Bob Ragain WB4ETT Littleton, CO

...chop...

<1(502) 893 8724
<William Perry Company
<92 Beechwood Rd
<Louisville Ky 40207
<
<fax 502 893 9220
<
<MIL connectors. Green and RF
<
<73,
<
<Garey - K40AH
<k4oah@mindspring.com
<Atlanta

Date: Fri, 31 Oct 1997 13:01:17 -0700
From: Dexter Francis <cwest@xmission.com>
To: boatanchors@theporch.com
Subject: R-390 Power Supply rebuild ?'s
Message-ID: <345A390C.785C@xmission.com>

Greetings all -

I finally bit the bullet and got me an R-390/URR (Not an "A")
(S.N. 960, Order No. 13602-PH-53, Motorola, for Tom's list.)

I've been doing triage on it this morning and discover that the
power supply section looks fully fried under the 26Z5's. (Black,
Carbonaceous deposits EVERYWHERE.)

I intend to rebuilt the beast, and would appreciate any advice on
working on the PS section. "Somebody's" attention to detail wasn't top
drawer previously and I'll likely tear it all the way down and start
from scratch. Hopefully the transformer isn't fried...

So, if there are any tips, tricks or treats I ought to know about before
digging in, please advice.

thanks in advance.

-df

--

Visit our Web site at <http://www.xmission.com/~cwest/>
e-mail to: tubes@usa.net -or- cwest@xmission.com
(P.O. Box 22443, Salt Lake City, Utah 84122)

Date: Thu, 30 Oct 1997 13:52:50 -0500
From: Ed Sieb <esieb@gmsiworld.com>
To: "'BoatAnchors'" <boatanchors@sco.theporch.com>
Subject: Nice DSP for Boatanchors
Message-ID: <01BCE53B.1D67BBE0@dstephen.gmsiworld.com>

One last comment about the DSP, since someone sent me a message asking =

about it...

Features: 6 switchable band pass settings: 1.5 Khz., 1.8/2.1 Khz, 2.7 =
Khz, 6Khz, 250 Hz,
Dynamic notch filter: automatically finds, tracks and eliminates =
heterodynes, squeals, etc. This feature works extremely well and is =
worth the original selling cost of the unit.
Hi-cut ("noise reduction").

Also has by-pass function and built-in 5W audio output stage. Designed =
to accept speaker level input.
Now, I have no idea why Radio Shack never did well with this little =
unit. Somehow, I imagine they just never marketed it properly, to the =
right audience. It seemed to have been primarily marketed to CB'ers, and =
SWL's, neither of whom, I think, really understood or appreciated the =
value of a DSP. Pity. It performs extremely well and I even use it on =
my rice-box, a Yaesu FT-990! I use it on my HQ170 and the R388 and =
really adds to the enjoyment and performance of these receivers. To be =
totally honest, the notch filters in both those rigs are as good as if =
not better than the DSP, and it's fun to manipulate controls to achieve =
the required results. Still there are times when instant, hi-tech =
solutions are required, (like when you're in the middle of a QSO and =
some %@*&! decides to tune up on frequency, and you can't get to the =
receiver's controls quick enough!).

No, I don't work for RS, and get no remuneration for this "endorsement". =
I just like to tell people about neat gizmos, when I come across them.

Good luck finding these overlooked and underrated little boxes.

Ed VA3ES

Date: Fri, 31 Oct 1997 12:30:26 -0800
From: Scott Robinson <spr@dolby.com>
To: cwest@xmission.com
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: R-390 Power Supply rebuild ?'s
Message-ID: <345A3FE2.8CFE9EBE@dolby.com>

Dexter Francis wrote:

> Greetings all -
>
> I finally bit the bullet and got me an R-390/URR (Not an "A")
> (S.N. 960, Order No. 13602-PH-53, Motorola, for Tom's list.)
>
> I've been doing triage on it this morning and discover that the
> power supply section looks fully fried under the 26Z5's. (Black,
> Carbonaceous deposits EVERYWHERE.)

and Scott sez:

Well, I've seen rectifier tube sockets in ordinary radios get carbon tracked and fry themselves occasionally. Replace BOTH rectifier sockets and fyoud should be OK, persuming as you say that the transformer isn't fried. Things with fuses tend not to wreck as many poower transformers as things without fuses...

Regards,

Scott Robinson
spr@earthlink.net

Date: Fri, 31 Oct 1997 14:48:16 -0600 (CST)
From: Bob Roehrig <broehrig@admin.aurora.edu>
To: Boatanchors <boatanchors@sco.theporch.com>
Subject: Drake 2-C for trade
Message-ID: <Pine.ULT.3.96.971031144446.28038A-1000000@admin.aurora.edu>

I have a good 2-C that I would like to trade for a SX-28 in good shape. Also have the matching 2CQ speaker/Q-mult. Retubed and aligned. Works great. 2-C is about an 8 to 9 appearance-wise, and the 2CQ about a 7 (some flecks of paint missing on front). The 2-C has the typical copper grunge on top of the chassis but is like new undereath. The 2-C has the 100KC calibrator in it also.

UFO's are real! (It's the Air Force that does not exist)
E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL
630-844-4898 Fax 630-844-5530

Date: Fri, 31 Oct 1997 17:42:40 -0500
From: "STEVE FINELLI" <navrad@enter.net>
To: <boatanchors@theporch.com>
Subject: Military Radio & misc. items FS
Message-ID: <199710312242.RAA13173@mail.enter.net>

Hello Gang,
The following items listed are available for sale or trade.
I will be glad to answer any questions you may have about listed items.
Shipping is extra on all items.

For Sale

1. TBY-8 transceiver. v-good original cond. except front panel paint. This panel does not have the radioactive paint like the earlier models. Made by Colonial Radio. Includes original key with rubber cover & battery straps. \$60.00
2. BC-733-D rec. V-good original cond. \$5.00
3. RAK/RAL-8 rec. Control Units. Type CMX-23073-A Qty-2 NOS with tags. 1 is excellent, 1 has paint peeling on left side. \$25.00ea.
4. TCS dynamotor pwr supply. Type 21881 12vdc input. NOS has some paint peeling on dynamotors & minor rust on ID tag. \$45.00
5. Diving Amplifier Equipment. Giuded Radio Corp. Model 957 Qty-2 with spares chests. 1 NOS & 1 used v-good cond. These were used to talk to a diver from ship.

WWII navy.

6. Connectors:

- A. ART-13 Type U-10/U 3 pin for pwr input to dynamotor. Qty-2 NOS \$15.00ea.

This can also be used with ATD dynamotor.

- B. ART-13 Type U-9/U 10 pin male for dynamotor to trans. NOS Qty-1
C. ART-13 Type U-7/U 10 pin female for trans. to dynamotor. used-fair cond. Qty-1 Will sell U-7 & U-9 as set only. Price \$35.00

- D. ARC-5 Type 9123 6 pin NOS \$8.00ea.

- E. ARC-5 Type 9125 8 pin NOS \$8.00ea.

7. Manuals:

- A. RAK-7 rec. NOS \$20.00
B. RBB/RBC-1 \$20.00
C. R-274 (SX-73 Hallicrafters) \$15.00
D. SCR-536 (BC-611) TM11-235 Qty-2 1 has repro. cover \$15.00ea.
E. SE Ships entertainment system \$5.00
F. T-368 Summary of instructions & calibration chart. This goes in pocket on side of trans. \$10.00
G. TCS-14 Preliminary Instruction Book fair cond. \$15.00
H. TV-7 Tube Tester Operator's & Organizational Maintenance Manual TM11-6625-274-12 \$10.00
I. GRC-9 Trans. TM11-263 NOS \$20.00

J. IC/SGI-1 Loudspeaker \$5.00
K. PAM-1 Portable Announcing Equipment. \$5.00
L. WRT-1 Trans. 300-1500kc 500w.

WANTED:

WWII Navy: Transmitters Type TCA, TCE,TCX,TDE or accessories, any condition.

Receivers: RAX, RBD.

Signal Corps. BC-652 rec.

Misc. Wants: ATB shockmounts, remote controls. GF/RU shockmounts, remote controls.

Contact:

Steve Finelli N3NNG
37 Stonecroft Dr.
Easton, Pa. 18045
610-252-8211
navrad@enter.net

Date: Fri, 31 Oct 1997 18:03:15 -0500
From: "Manuel W4SSB" <mmaseda@gte.net>
To: "Old Tube Radios" <boatanchors@theporch.com>
Subject: WTB: ART-13 dynamotor
Message-ID: <199710312308.RAA08540@smtp2.mailsvcs.net>

I'm looking for an original ART-13 dynamotor.

Manuel W4SSB

Date: 31 Oct 1997 17:40:49 -0600
From: "A. B. Bonds" <ab@vuse.vanderbilt.edu>
To: boatanchors@sco.theporch.com

Subject: Price advice, DoD tx's and rx's

Message-ID: <1997Oct31.174050-0600@spike.vuse.vanderbilt.edu>

A local chap is thinking about selling some of his stuff. He has four items that he has proposed for sale, but is unclear what to ask. His current thinking is about \$200 each, but I didn't think that would fly. I would appreciate comments on these items, as I don't know them very well.

ART-13 transmitter, no PS, missing some tubes, kinda grungy but clearly fixable, cosmetic 7.

CAY52173A transmitter, same condx, has output tube but missing one or two drivers.

CND46156 receiver, with power supply, BIG, HEAVY. RCA manufacture. Some corrosion on front panel but fairly complete, cosmetic 6(+)? (it is fairly complete, no extra holes)

CRV46044 receiver, as above.

Not sure these last two babies would ship.

I don't think he is ready for formal offers yet, just wants to get a ball-park.

A. B. Bonds (Nashville, TN)

Date: Fri, 31 Oct 1997 18:04:32 -0600

From: bill wilson <billo@nti.net>

To: boatanchors@theporch.com

Subject: FS: Hallicrafters SX-73/R274D

Message-ID: <19971101000431310.AAA179@NOTORIOUS>

Hallicrafters SX-73/R274D, rack mount, all covers. S-meter and antenna trimmer knob not original. Needs coils for band six only. Manual included. Asking \$400, split shipping, works and looks fine.

Bill

W4BIZ

Jacksonville, Al. 36265

205-435-4538

Date: Fri, 31 Oct 1997 19:01:55 +0000
From: "Lawrence R. Ware" <lrware@pipeline.com>
To: boatanchors@sco.theporch.com
Subject: Larry's Halloween giveaway
Message-ID: <3.0.32.19971031190150.006beafc@pop.pipeline.com>

Good evening fellow firebottle fans, fanatics, & followers!
As the local "trick or treater's" are stymied by heavy rain tonight down here in O'town, I've just got to give something to somebody somehow!

So for lack of a better prepared list, here is tonight's junk list,
(Errrrr, make that "Fine Examples of Older Technology," and remember;
They Don't Make Em Like They Used To!)

Tonight we will start with some scary paper, scary to BA folks anyway... :-)) A while back as part of a pallet load of manuals I ended up owning were a lot of very old SAMS photofact folders. Not only do these things have almost no resale value, they are too heavy to be worth shipping around. Having #2-750 of the darn things sitting around and taking up space is one of my personal horrors, so I began going through them and sorting them into several categories: First I started tossing all the old TV folders, then put the remainder into piles based loosely on type of equipment.... One of which is old transistor pocket radios. (Told you it was scary, sand-state even!) I know there are lots of collectors of these things around, maybe even you. Don't worry I won't tell.. :-))

Anyway item #1 tonight is SAMS transistor radio paper, by the pound! Everyone who asks gets 1-2 lbs of unsorted (except as noted above) early SAMS pocket radio paper. All I can stuff into a 2lb priority mailer envelope!

Item #2 is 1-2 lbs of early firebottle tabletop and portable radio SAMS paper. Again all I can stuff into a 2 lb mailer. Mostly BCB types here, brands from Airking to Zenith.

Item #3 is 1-2 lbs of early console radio data, again all I stuff into a 2 lb priority mailer. A to Z again.

Item #4 is 1-2 lbs of record changer and portable record player data. Same deal as above. (Somebody has to collect these...)

Item #5 is several pounds of early tube amplifier photofacts, everything from cheap Eico's to Bogan PA, to Macintosh...

Remember these are all unsorted and potluck packages, but all I need is the shipping costs to get them to your doorstep.

Item #6 is several pounds of assorted old parts; Several big scoops

from my current overflowing junk box. Parts include: resistors, crystals, hardware, IF transformers, B&W miniductor's unmarked & untested tubes, connectors... well you get the idea, like giving away cheap candy to the kiddies... Here kid, have a fistful. :-)

Will also be throwing in anything around here that looks like someone would want it for something, at random into outgoing packages. Just like the surprise prize at the local happy-meal place...

I will promise that everything is usable, maybe not by you, but to someone anyway. Even though it *is* Halloween, I'll refrain from tossing any of my large pile of open filament duds into the mix. :-)

Free for shipping costs while it lasts, in case of lots of requests, "Rules of Ware" will apply... In case of very few requests, please state maximum number of pounds you are willing to provide a home for. :-)

-Larry

Larry's Home for Wayward Test Equipment & Old Radios (tm)
Let your equipment retire in sunny central Florida.
Intensive Care, Private Bench Space, Frequent Use,
Factory trained HP, Tek & Fluke Surgeon on staff.
Good Home Guaranteed or double your junk back!
lrware@pipeline.com - Orlando, FL -

Date: Fri, 31 Oct 1997 18:23:34 -0600
From: Tom Norris <badger@telalink.net>
To: boatanchors@theporch.com
Subject: A VERY interesting wrong number!
Message-ID: <3.0.3.32.19971031182334.008cbb0@telalink.net>

Got a voice mail this evening when I came home to call a Frank Mallinson regarding an exhibit of the Gibson Girl transmitter at a museum in Virginia.

Very odd I said to myself, I don't know any Frank Mallinson's, nor did I recall any discussion of the Gibson Girl that I myself had had.

Well, the gentleman called back. Turned out it was a wrong number, and he was looking for someone in the Navy in Norfolk with a similar call to my own. BUT.....

It also turned out this guy, Frank Mallinson was the developer of the Gibson Girl, he said. He was with ARL (Aircraft Radio Labs)

in Wright Field and was on the team that built the first one, he said, in 1942. Had a nice chat with the guy, now 92 years old. Very nice fellow. We discussed the radio, he mused on the lives it saved and how it lead to the development of later model of rescue gear. All in all a pleasant conversation. Being as it was his dime and after all it was a wrong number, I didnt keep him on the phone for very long....

His original call was to inform the party he was actually trying to call of a museum exhibit of the Gibson Girl. He commented on how the later production models were much heavier than the prototypes at ARL.

Sounds like time to start up another Gibson Girl thread -- especially in light of this past weeks comments here on the list with folks calling them Mae Wests and all.... :-)

Comments?

Tom KA4RKT
badger@telalink.net

Date: Fri, 31 Oct 1997 19:39:15 -0600 (CST)
From: DEE ALMQUIST <w4pnt@rica.net>
To: boatanchors@theporch.com
Subject: FS: VINTAGE TUBES
Message-ID: <199711010139.TAA00912@sco.theporch.com>

Hi Gang

Late summer I ran into what was left of the estate of local ham that I knew well. Man, some of the old TX Eimacs, etc he had tucked away! Nothing large just interesting. I wont list them here but if you would like a list let me know and I will e-mail.

73

Dee

Patty, KA4EKK & Dee, W4PNT

Patty and Dee's Marina, collectors of Drake, Johnson, Collins, RCA, Hammarlund, homebrew and other heavy metal. ALL HOBBY....WE'RE RETIRED!

(540)249-3161 Fax: (540) 249-5064
534 W. Main St. Waynesboro, Va. 22980

<http://home.rica.net/soundnmind>

Date: Fri, 31 Oct 1997 19:39:46 -0600 (CST)
From: DEE ALMQUIST <w4pnt@rica.net>
To: boatanchors@theporch.com
Subject: WTD JOHNSON & DRAKE SALES LITER.
Message-ID: <199711010139.TAA00957@sco.theporch.com>

Hi Gang

Been long summer here trying to get the home place restored and all. No time for ham radio. So I'm finally getting around to this want. I'm looking for any catalog info (Johnson) prior & after catalog 957(which I have). Wanting to make color copies for preservation. Also looking for any Drake sales literature other than the 1977 catalog. Any help would be appreciated.

Regards

Dee

Patty, KA4EKK & Dee, W4PNT

Patty and Dee's Marina, collectors of Drake, Johnson, Collins, RCA, Hammarlund, homebrew and other heavy metal. ALL HOBBY....WE'RE RETIRED!

(540)249-3161 Fax: (540) 249-5064
534 W. Main St. Waynesboro, Va. 22980

<http://home.rica.net/soundnmind>

Date: Fri, 31 Oct 1997 18:07:24 -0800 (PST)
From: Ken Gordon <keng@uidaho.edu>
To: Ed Sieb <esieb@gmsiworld.com>
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Nice DSP for Boatanchors
Message-ID: <Pine.BSF.3.95.971031180603.5300C-100000@piobaire.mines.uidaho.edu>

> Good luck finding these overlooked and underrated little boxes.

Could you PLEASE provide us with the RS part number, as in 26-172 (not the real number, guys) or some such ?

Ken W7EKB

Date: Fri, 31 Oct 1997 18:20:54 -0800 (PST)
From: Ken Gordon <keng@uidaho.edu>
To: boatanchors@sco.theporch.com
Subject: Re: Nice DSP for Boatanchors (fwd)
Message-ID: <Pine.BSF.3.95.971031182020.5300F-100000@piobaire.mines.uidaho.edu>

> Could you PLEASE provide us with the RS part number, as in 26-172 (not
> the real number, guys) or some such ?
>
> Ken W7EKB
>
>

21-543 (according to my local sales-droid). No luck finding it here.
If you think it is worth posting it to the list, please do so.

Gabor.

Date: Fri, 31 Oct 1997 21:03:46 -0500
From: Dennis Gibbs <dgibbs@Rational.COM>
To: "'boatanchors@theporch.com'" <boatanchors@theporch.com>
Cc: "'dgibbs@rational.com'" <dgibbs@Rational.COM>
Subject: National HRO-60 B+ power supply question
Message-ID: <01BCE640.7AF80020@dasher.rational.com>

Greetings all,

After the Trick-or-Treaters were done this evening, I decided to fire up the 'ole HRO-60. The last time I fired it up, I had suspected that the B+ supply was marginal. I tested the 0B2 in my TV-2B/U Tube tester, and it came out fine. Substitution of other 0B2 tubes didn't seem to change anything.

Then, by accident, I discovered that the receiver still operates with no VR-tube in it! The manual indicates that the HF Oscillator tube (a 6C4) and the S-meter amplifier tube (a 6SN7) have their plate supply regulated by this 0B2 VR tube. When I pull the 0B2 out, the S-meter

moves to zero, but there is no apparent change in the sensitivity of the receiver!
I can still
tune in and listen to various stations.

Interestingly, I vaguely recall that when I bought this receiver at a hamfest
several years ago,
someone had put an 0A2 VR tube even though an 0B2 is clearly called for. I'm now
suspecting
that something is wrong, but I haven't yet begun to dig in yet.

Before I do, has anyone else had any problems with the B+ supply with this
receiver? If you
have an HR0-60, does it still play when the 0B2 is removed?

Thanks for any help you HR0-60 owners can give.....

Dennis Gibbs
dgibbs@rational.com

Date: Fri, 31 Oct 1997 21:10:36 -0500 (EST)
From: Andre Guibert <aguibert@sympatico.ca>
To: boatanchors@theporch.com
Subject: Gibson Girl
Message-ID: <199711010210.VAA28121@smtp1.sympatico.ca>

Bonsoir (HI) A Tous
5 years ago when visiting a Maritime Museum in
L Islet Quebec I came across a German made
emergency transmitter who was almost a carbon copy
of the Gibson Girl but it seemed to have been made
in the early 40s.
QST dated OCT 45 mention that the original model
was the AN/CRT-3 with only 500 Kc and the Coast Guard
had developed an improved version with added
frequencies and was called the SCR578.
What is odd is that the one I have is a T74A/CRT-3,
Contract? AF-33(0338) 19746, with both 500Kc/8364Kc
and signal light on selector sw.
Made by Kinston Prodct, Kokomo Ind.
What came out first, the Gibson or the German model?
The manual that I have is for the AN/CRT3, revised
April 45 and deals with the 500/8280 Kc model, who
seems outwardly the same as mine except for the
different second frequency.

Andre

Date: Fri, 31 Oct 97 20:22:44 -0600
From: "Joseph W. Pinner" <kc5ijd@sprintmail.com>
To: "Boatanchor 1" <boatanchors@theporch.com>
Subject: Re: Gibson Girl
Message-ID: <199711010213.SAA20504@mailgate32>

>What came out first, the Gibson or the German model?

My understanding is that the German set was first and that we copied one that was captured by the British.

73

Joseph W Pinner
Lafayette, LA
KC5IJD
EMail: kc5ijd@sprintmail.com

Date: Fri, 31 Oct 1997 21:44:35 -0500 (EST)
From: K6qy@aol.com
To: boatanchors@theporch.com
Subject: Tubes vs Silicon
Message-ID: <971031214413_1803173653@mrin46.mail.aol.com>

The discussion regarding solid stating the power supply in BAs has made some interesting points.

The problem is not so much the fact that high voltage is placed on the tubes before the filaments warm the cathode but, the fact that the voltage rises to max instantly. With a tube rectifier the voltage rises slowly and smoothly as the filament heats and the tube starts conducting.

Just look at a VR tube in a solid stated rig when the power switch is turned on. The flash will convince you to put that old 5R4 back in.

Gerald Morris K6QY@aol.com

Date: Fri, 31 Oct 1997 21:15:25 -0600 (CST)
From: oglesby2@ix.netcom.com (John Oglesby)
To: boatanchors@theporch.com
Subject: 51-J4 dial needed
Message-ID: <v01520d02b08007f4cf94@[207.93.154.91]>

I have a 51-J4 that needs a new "Mhz" dial. The current one is yellowed from many years of smoke. The rest of the radio cleaned up well, but the dial paper is too far gone. I have heard that there are reproductions made, but I haven't been able to find a source. Can anyone steer me the right way? - Thanks - John

Date: Fri, 31 Oct 1997 19:55:05 -0800 (PST)
From: Ken Gordon <keng@uidaho.edu>
To: boatanchors@sco.theporch.com
Subject: RS DSP filter...
Message-ID: <Pine.BSF.3.95.971031195327.6065A-100000@piobaire.mines.uidaho.edu>

As previously posted:

RS number is 21-543

The original cost was \$80.00, not \$8.00 as I may have mis-read in a previous post.

In any case, our local RS outlet says that if you can find one, they are on sale for \$49.00. They had one. I grabbed it.

Ken W7EKB

Date: Fri, 31 Oct 1997 21:21:27 -0600
From: "Jim Zellmer" <zellmer@raccoon.com>
To: "boatanchors digest" <boatanchors@sco.theporch.com>
Subject: R390A antenna Jacks
Message-ID: <199711010556.XAA08743@slip1.raccoon.com>

Since winter is coming I thought it would be a good time to drag out the R390A

again. I have be using the unbalanced antenna jack with a small finishing nail and a clip lead going to one side of my dipole for a while. This works pretty well for casual SWL work and general listening on the Ham bands. I seem to remember a note on the list sometime in the last two years about swaping one of the three cables going into the antenna relay assembly. The note might have mentioned that this was a standard Navy mod. Would this be done to allow the unbalanced line to utilize the tunable RF section that is used with the balanced antenna input?

I have also made up a balanced cable adapter with a surplus piece of sheilded cable and IBM connector and a couple of alligator clips. This cable is hooked up to the dipole. I could not hear any significant difference between the two systems.

Any comments?

73 ES GOD BLESS U ES URS

JIM ZELLMER, KA0VSL

Date: Fri, 31 Oct 1997 22:07:17 -0600 (CST)
From: Bob Roehrig <broehrig@admin.aurora.edu>
To: Dennis Gibbs <dgibbs@Rational.COM>
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: National HRO-60 B+ power supply question
Message-ID: <Pine.ULT.3.96.971031220248.9566A-100000@admin.aurora.edu>

On Fri, 31 Oct 1997, Dennis Gibbs wrote:

> Then, by accident, I discovered that the receiver still operates
> with no VR-tube in it!

This is not unusual. The VR tube is a shunt device which connects to B+ thru a series current limiting resistor, just like a zener diode is used in solid state stuff. If you remove the tube, current still flows thru the resistor to the load. The voltage to the load will then be higher than it should be, and obviosly, unregulated.

Some of the VR tubes have internal jumpers that allow them to be

connected so that if the tube is removed, the path to the load is opened but not all equipment mfrs wired them into the circuit.

UFO's are real! (It's the Air Force that does not exist)
E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL
630-844-4898 Fax 630-844-5530

Date: Fri, 31 Oct 1997 22:29:43 -0600 (CST)
From: Mike Maloney <ac5p@ionet.net>
To: oglesby2@ix.netcom.com
Cc: boatanchors@theporch.com
Subject: Re: 51-J4 dial needed
Message-ID: <199711010429.WAA02025@mail.ionet.net>

Hi John, Ron Hankins, KK4PK, 555 Seminole Woods Blvd., Geneva, FL 32732
(407) 349-9150 runs monthly ads in Electric Radio for them- \$10 ea,
specify which 51J model. Dont know if he has e-mail.
Mike

At 09:15 PM 10/31/97 -0600, you wrote:
>I have a 51-J4 that needs a new "Mhz" dial. The current one is yellowed
from many years of smoke. The rest of the radio cleaned up well, but the
dial paper is too far gone. I have heard that there are reproductions made,
but I haven't been able to find a source. Can anyone steer me the right
way? - Thanks - John
>
>
>
>

Date: Fri, 31 Oct 1997 23:51:03 +0000
From: "Lawrence R. Ware" <lrware@pipeline.com>
To: boatanchors@sco.theporch.com
Subject: Larry's Halloween giveway (part II)
Message-ID: <3.0.32.19971031235045.006e5644@pop.pipeline.com>

Part II, where the fun continues...

Yet *More* paper:

Item #7: One original 1939 copyright tube basing wall chart. From

Hygrade Sylvania Corporation, Emporium, Penn. Pretty good shape for almost 60 years old... :-)

Item #8: One copy "Frequency Modulation" by John F. Rider. Small hardback in good condition, with ratty dust cover. 1944 edition.

Item #9: Original operations and maintenance manuals (two) for the Type "TAV" Gryo Test Unit made by C. G. Conn, LTD. Elkhart, Indiana.

Item #10: Original Collins Avionics Customer Price List. Several hundred pages of pricing and other data about 1975 Collins products.

OK that's about it for my current paper overstock...
Not bad, with a little luck I'll dump 100 lbs of stuff on someone else.
Amazing what I'll do to keep from cleaning out the lab... :-)

Some early replies from part 1 tell me it's time to explain the "Rules of Ware" again....

A **short** explanation of what has become known to a number of members, (primarily those with an **odd** sense of humor :-)) as the "Rules of Ware." Usually used to once again dump some junk, Errr. "Great Stuff" on unsuspecting fellow travelers... :-)

About 1.5 years ago we had a minor flare up on BA concerning auction rules and procedures. Jack stomped it flat **real** fast, but a lot of hard feelings were still around.
Partly as a joke, and partly to make a point, I gathered up boxes full of old junk and started to give it away in a sorta contest format.
Over a period of several months lots of junk was passed on to new homes under a semi whimsical, often changing set of "rules."
(Once in a while people even got something they needed :-)

I received a lot of positive e-mail concerning what I was doing and several people began publicly referring to the giveaway rules as the "Rules of Ware." It kinda stuck... :-)

I'm still flattered, was even more so when Jack Hill referred to the rules as my personal "list immortality."

I change them slightly whenever posted but in essence the deal goes something like this.... (Drum Roll for effect here please, maestro...)

The rules:

Here's the most important rule: I **would** like shipping reimbursed, lately some of you have been forgetting that the USPS requires real money, (That's the government for you... always expect

you to pay first, maybe get something later... :-)

1) You get to pay the shipping.

Winners will be determined by:

2) Tell me why you need/want them, points awarded for:

- a) For the books, you must be willing to quote them back to me, chapter and verse on request. :-)
- b) Needing something to complete a project or repair.
- c) It's for someone your "Elmer-ing."
- d) *Making up an outrageous story of what you will/did use it for. :-)
 - * For item "d" the taller and more unbelievable the better...

Stories about how Howard Sams was your hero as a child because you managed to fix the family radio/TV/washing-machine before dad knew you took it apart with Howards help are encouraged. Stories about how you used the photofacts to fix the warp drive in the UFO in your backyard are good. Stories about how you used a photofact, some guile, and a good line to convince your neighbor the CB "good buddy" that you could make his rig put out 100 watts for only beer money are very good. :-)

Stories about how Howard stole all his information from Tesla and Edison could be a winner.

3) Bonus points to anyone who has sent me a manual, helped me find a part, or provided advice, (good or bad, it's the effort that counts. :-) or sold me something at a reasonable price.

4) Bonus points to everyone who has contributed information, time, manuals, or encouragement on my research project.

5) Offers of something in trade are encouraged if you *really* must have the whatever...

6) Offers of cash are frowned upon and will cost you points. :-(
If I wanted to hold an auction, I'd hold an D\$#% auction.

7) I try to wait a few days before deciding winners to give the digest reading gents a fair chance. Depending on what is up for grabs, I sometimes cross-post to other lists like "glowbugs" or "vss."

Winners will be determined any darn way I feel like.
Judges decision is final.

-Larry Ware

-Larry Ware
lrware@pipeline.com
Orlando, Florida

End of BOATANCHORS Digest 1750
